## **ABSTRACT**

A device, a kit and a method for the hybridization reactions between biomolecules are disclosed. The invention relates to a hybridization chamber including a generally planar substrate which includes a specimen area containing at least one biomolecule. The hybridization chamber also includes a frame surrounding at least a portion of the specimen area. The frame defines walls of a well for holding a fluid when the frame is in contact with the substrate. The frame includes a connector adapted to connect to tubing for supplying fluids to the well. Tubing connected to the connectors may be used to supply wash fluid and hybridization fluid, and waste tubing may be connected to a second connector for removing waste material from the well.